

Amendments to the Claims

The following listing of claims will replace all prior versions and/or listings of claims in the application.

Listing of Claims:

- 1-14. (cancelled)
15. (currently amended): An intervertebral implant for a human spine, comprising:
a cage element comprising a superior surface and an inferior surface, wherein the inferior surface of the cage element is configured to support a first vertebra of the human spine to inhibit movement of the first vertebra towards a second vertebra, and wherein the superior surface of the cage element comprises a first opening;
an insert comprising a support surface for the second vertebra, wherein the support surface, during use, supports at least a portion of the second vertebra above and away from the superior surface of the cage element and inhibits movement of the second vertebra towards the first vertebra, and wherein the insert, during use, is ~~positioned~~inserted at least partially into the cage element; and
an expansion member that, during use, is inserted in the cage element through an opening in a side of the cage element to expand the intervertebral implant by elevating the insert to move a portion of the insert through the first opening in the superior surface of the cage element so that at least a portion of the support surface of the insert is raised above and away from the superior surface of the cage to support at least a portion of the second vertebra above and away from the superior surface of the cage element.
16. (previously presented): The intervertebral implant of claim 15, wherein the intervertebral implant is configured such that the direction of movement of the expansion member is substantially perpendicular to the direction of movement of the insert.

17. (previously presented): The intervertebral implant of claim 15, wherein the expansion member is configured to be advanced between an interior surface of the cage element and the inferior surface of the insert.
18. (previously presented): The intervertebral implant of claim 15, wherein the support surface of the insert comprises osteoconductive mesh structure.
19. (previously presented): The intervertebral implant of claim 15, wherein an interior surface of the cage element comprises a raised portion configured to inhibit backout of the expansion member after expansion of the intervertebral implant.
20. (previously presented): The intervertebral implant of claim 15, wherein the expansion member comprises an angled portion configured to engage an angled portion of the insert to facilitate insertion of the expansion member in the cage element.
21. (currently amended): An intervertebral implant for a human spine, comprising:
a cage element comprising a superior surface and an inferior surface, wherein the inferior surface of the cage element is configured to support a first vertebra of the human spine to inhibit movement of the first vertebra towards a second vertebra, and wherein the superior surface of the cage element comprises an opening;
an insert comprising an inferior surface and a support surface for the second vertebra, wherein the support surface, during use, supports the at least a portion of the second vertebra above and away from the superior surface of the cage element and inhibits movement of the second vertebra towards the first vertebra, wherein the insert, during use, is ~~positioned~~ inserted at least partially into the cage element such that at least a portion of the inferior surface of the insert is below the superior surface of the cage element and at least a portion of the support surface of the insert is above the superior surface of the cage element to support at least a portion of the second vertebra above and away from the superior surface of the cage element; and

an expansion member that, during use, is inserted in the cage element through an opening in a side of the cage element to elevate at least a portion of the insert through the opening in the superior surface of the cage element so that the support surface of the insert is raised above and away from the superior surface of the cage to support at least a portion of the second vertebra above and away from the superior surface of the cage element.

22. (previously presented): The intervertebral implant of claim 21, wherein the intervertebral implant is configured such that the direction of movement of the expansion member is substantially perpendicular to the direction of movement of the insert.

23. (previously presented): The intervertebral implant of claim 21, wherein the expansion member is configured to be advanced between an interior surface of the cage element and the inferior surface of the insert.

24. (previously presented): The intervertebral implant of claim 21, wherein the support surface of the insert comprises osteoconductive mesh structure.

25. (previously presented): The intervertebral implant of claim 21, wherein an interior surface of the cage element comprises a raised portion configured to inhibit backout of the expansion member after insertion of the expansion member.

26. (previously presented): The intervertebral implant of claim 21, wherein the expansion member comprises an angled portion configured to engage an angled portion of the insert to facilitate insertion of the expansion member in the cage element.

27. (previously presented): An intervertebral implant for a human spine, comprising:
a cage element with a superior surface and an inferior surface, wherein the inferior surface of the cage element comprises a first opening and the superior surface of the cage element comprises a second opening;

a first insert, wherein, during use, at least a portion of the first insert is ~~positioned~~inserted
at least partially into the first opening, and wherein the first insert comprises a
support surface that, during use, supports at least a portion of a first vertebra
below and away from the inferior surface of the cage element and inhibits
movement of the first vertebra towards a second vertebra;
a second insert, wherein, during use, at least a portion of the second insert is ~~positioned~~
inserted at least partially into the second opening, and wherein the second insert
comprises a support surface that, during use, supports at least a portion of a
second vertebra above and away from the superior surface of the cage element
and inhibits movement of the second vertebra towards the first vertebra; and
an expansion member that, during use, is inserted in a third opening in the cage element
to lower the support surface of the first insert below and away from the inferior
surface of the cage element to support at least a portion of the first vertebra below
and away from the inferior surface of the cage element and inhibit movement of
the first vertebra towards a second vertebra,
wherein the expansion member when inserted in the third opening raises the support
surface of the second insert above and away from the superior surface of the cage
element to support at least a portion of the second vertebra above and away from
the superior surface of the cage element and inhibit movement of the second
vertebra towards the first vertebra.

28. (previously presented): The intervertebral implant of claim 27, wherein the intervertebral implant is configured such that the direction of movement of the expansion member is substantially perpendicular to the direction of movement of the first insert and the second insert.

29. (previously presented): The intervertebral implant of claim 27, wherein the expansion member is configured to be advanced between a superior surface of the first insert and an inferior surface of the second insert.

30. (previously presented): The intervertebral implant of claim 27, wherein the support surface of the first insert comprises osteoconductive mesh structure.

31. (previously presented): The intervertebral implant of claim 27, wherein the support surface of the second insert comprises osteoconductive mesh structure.
32. (previously presented): The intervertebral implant of claim 27, wherein an interior surface of the cage element comprises a raised portion configured to inhibit backout of the expansion member after insertion of the expansion member.
33. (previously presented): The intervertebral implant of claim 27, wherein expanding the intervertebral implant comprises increasing a height of the intervertebral implant.
34. (currently amended): The intervertebral implant of claim 27, wherein the expansion member comprises at least one angled portion configured to engage an angled portion of the first or second insert to facilitate insertion of the expansion member in the cage element.
35. (previously presented): The intervertebral implant of claim 15, wherein the support surface of the insert comprises at least a majority of a surface of the intervertebral implant that is configured to support the second vertebra.
36. (previously presented): The intervertebral implant of claim 21, wherein the support surface of the insert comprises at least a majority of a surface of the intervertebral implant that is configured to support the second vertebra.
37. (currently amended): The intervertebral implant of claim 27, wherein the support surface of the first insert comprises at least a majority of a surface of the intervertebral implant that is configured to support the first vertebra.
38. (previously presented): The intervertebral implant of claim 27, wherein the support surface of the second insert comprises at least a majority of a surface of the intervertebral implant that is configured to support the second vertebra.

39. (currently amended): An intervertebral implant for a human spine, comprising:
a first member comprising a first inferior surface and a first superior surface, where the first superior surface comprises a substantially planar surface configured to contact and support a first vertebra of a human spine;
a second member comprising a second inferior surface and a second superior surface, where the second inferior surface comprises a substantially planar surface configured to contact and support a second vertebra of a human spine;
a cage comprising a first opening in a superior surface of the cage and a second opening in an inferior surface of the cage, wherein, during use, the first member is inserted at least partially ~~disposed into~~ the first opening and the second member is ~~disposed~~ inserted at least partially in the second opening; and
an expansion element that, during use, is inserted between the first inferior surface of the first member and the second superior surface of the second member, wherein insertion of the expansion member expands the first and second members relative to one another to increase a separation distance between the first superior surface of the first member and the second inferior surface of the second member, wherein the first superior surface is expanded above the superior surface of the cage and the second inferior surface is expanded below the inferior surface of the cage, such that the distance between the first superior surface and the second inferior surface is greater than the distance between the superior surface and the inferior surface of the cage, and wherein the first superior surface supports at least a portion of the first vertebra above the superior surface of the cage and the second inferior surface supports at least a portion of the second vertebra below the inferior surface of the cage.

40. (cancelled).

41. (previously presented): The intervertebral implant of claim 15, wherein the support surface comprises a substantially planar surface that supports at least a portion of the second vertebra above and away from the superior surface of the cage element and inhibits movement of the second vertebra towards the first vertebra during use.

42. (previously presented): The intervertebral implant of claim 21, wherein the support surface comprises a substantially planar surface that supports at least a portion of the second vertebra above and away from the superior surface of the cage element and inhibits movement of the second vertebra towards the first vertebra during use.

43. (previously presented): The intervertebral implant of claim 27, wherein the support surface of the first insert comprises a substantially planar surface that supports at least a portion of the first vertebra above and away from the inferior surface of the cage element and inhibits movement of the second vertebra towards the first vertebra during use, and wherein the support surface of the second insert comprises a substantially planar surface that supports at least a portion of the second vertebra above and away from the superior surface of the cage element and inhibits movement of the second vertebra towards the first vertebra during use.

44. (previously presented): The intervertebral implant of claim 15, wherein the support surface of the insert comprises a substantially planar surface of sufficient cross-sectional area to support the second vertebra above and away from the superior surface of the cage element during use.

45. (previously presented): The intervertebral implant of claim 15, wherein, during use, the support surface of the insert supports the second vertebra above and away from the superior surface of the cage element such that the second vertebra does not contact the superior surface of the cage element.

46. (previously presented): The intervertebral implant of claim 21, wherein the support surface of the insert comprises a substantially planar surface of sufficient cross-sectional area to support the second vertebra above and away from the superior surface of the cage element during use.

47. (previously presented): The intervertebral implant of claim 21, wherein, during use, the support surface of the insert supports the second vertebra above and away from the superior

surface of the cage element such that the second vertebra does not contact the superior surface of the cage element.

48. (previously presented): The intervertebral implant of claim 27, wherein the support surface of the first insert comprises a substantially planar surface of sufficient cross-sectional area to support the second vertebra below and away from the inferior surface of the cage element during use, and wherein the support surface of the second insert comprises a substantially planar surface of sufficient cross-sectional area to support the second vertebra above and away from the superior surface of the cage element during use.

49. (previously presented): The intervertebral implant of claim 27, wherein, during use, the support surface of the first insert supports at least a portion of a first vertebra below and away from the inferior surface of the cage element such that the first vertebra does not contact the inferior surface of the cage element, and the support surface of the second insert supports at least a portion of a second vertebra above and away from the superior surface of the cage element such that the second vertebra does not contact the superior surface of the cage element.

50. (currently amended): An intervertebral implant, comprising:
a cage element implanted between a first vertebra and a second vertebra during use,
wherein the cage element comprises a first surface facing the first vertebra and a
second surface facing the second vertebra when implanted; and
a means an insert that is configured to be inserted at least partially into the cage element
for supporting the first vertebra in a position away from the first surface of the
cage element.

51. (new): The intervertebral implant of claim 15, wherein the expansion member is at least partially removed from the cage element after being inserted in the cage element through an opening in a side of the cage element to expand the intervertebral implant.

52. (new): The intervertebral implant of claim 21, wherein the expansion member is at least partially removed from the cage element after being inserted in the cage element through the opening in a side of the cage element to elevate at least a portion of the insert.

53. (new): The intervertebral implant of claim 27, wherein the expansion member is at least partially removed from the cage element after being inserted in the third opening in the cage element to lower the support surface of the first insert below and away from the inferior surface of the cage element to support at least a portion of the first vertebra below and away from the inferior surface of the cage element and inhibit movement of the first vertebra towards a second vertebra.

54. (new): The intervertebral implant of claim 39, wherein the expansion element is at least partially removed from the cage element after being inserted between the first inferior surface of the first member and the second superior surface of the second member.